<u>**A**MENDMENTS TO THE **C**LAIMS</u>

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1.   (Currently amended) A system that facilitates analyzing a network, comprising:

a network interface component that facilitates access to the network, the network interface component comprising:

a network traffic analyzer (NTA) component that analyzes network data <u>and diagnoses network related data problems</u>.

2.   (Original) The system of claim 1, the network traffic analyzer comprising a filter component that facilitates associating subsets of network data with respective sources and/or destinations of the data.

3.   (Original) The system of claim 1, the NTA comprising a control component that facilitates controls of at least a subset of the network based at least in part upon an analysis of network data by the NTA.

4.   (Original) The system of claim 1, the NTA further comprising an artificial intelligence component that performs a probabilistic analysis on the network data to facilitate determining a state of the network.

5.   (Original) The system of claim 1, the NTA further comprising an artificial intelligence (AI) component that performs a probabilistic analysis on the network data to facilitate inferring a state of the network.

6.   (Currently Amended) The system of claim 5, the inference relates to a predicted future state of the network <u>and/or a predicted future state of a device that is part of the network</u>.

7.   (Cancelled)

8.   (Original) The system of claim 1, the NTA is an asynchronous integrated circuit (ASIC).

9.   (Original) The system of claim 1, the NTA is software that makes up part of the network interface.

10.   (Original) The system of claim 1, the NTA is a combination of software and hardware that makes up part of the network interface.

11.   (Original) The system of claim 1, further comprising a data store that has stored thereon historical data relating to state(s) of the network.

12.   (Original) The system of claim 5, the AI component comprises at least one of: a trained classifier, a neural network, a data fusion engine, a Bayesian belief network, a Hidden Markov Model.

13.   (Original) The system of claim 1, the network traffic analyzer filter component comprising a data acquisition component that facilitates a filter and analysis of network related data problems.

14.   (Original) The system of claim 2, the filter component further comprising:
        a source MAC ID filter component;
        a destination MAC ID filter component; and
        a packet type filter component.

15.   (Original) The system of claim 14, the filter component further comprising:
        a sequence number filter component;
        a packet length filter component; and
        a checksum component.

16.   (Original) The system of claim 3, the control component further comprising a data collection start/stop component.

17.   (Original) The system of claim 16, the control component further comprising:

a memory status and control component; and

a memory upload and download component.

18.   (Currently amended) A network analysis system comprising;

means for accessing and interfacing with a network; and

means for analyzing and diagnosing ~~the~~ network related data problems, the means for analyzing and diagnosing is integrated with the means for accessing and interfacing with the network.

19.   (Previously Presented) A method for allocating network traffic analysis tasks to networked devices comprising:

activating respective monitoring components embedded into network interface of a plurality of devices of a network;

requesting resource utilization data from a subset of the activated monitoring components;

accepting resource utilization data from the subset of activated monitoring components;

evaluating the resource utilization data;

determining which devices have greatest available resources based at least in part on the resource utilization data; and

allocating network traffic analysis tasks based at least in part on the available resources.

20.   (Previously Presented) A method for allocating network traffic analysis tasks to networked devices comprising:

activating a monitoring component embedded into network interface of more than one device on a network;

requesting resource utilization data from each activated monitoring component;

accepting resource utilization data from each activated monitoring component;

evaluating the resource utilization data;

determining which device has the greatest available resources based at least in part on the resource utilization data; and

allocating the network traffic analysis tasks to the device with the greatest available resources.

21.   (Presently Presented) A method for allocating network traffic analysis tasks to networked devices comprising:

activating a monitoring component embedded into network interface of more than one device on a network;

requesting resource utilization data from each activated monitoring component;

accepting resource utilization data from each activated monitoring component;

evaluating the resource utilization data;

determining the available resources for each device based at least in part on the resource utilization data;

allocating the network traffic analysis debug task to the device with the greatest available resources; and

allocating the network traffic analysis control task to the device with second greatest available resources.

22.   (Previously Presented) The system of claim 1, wherein the network traffic analyzer is embedded into the network interface component.

23.   (Previously Presented) The system of claim 22, wherein the network interface component is a network interface of a networked device.

24.   (New) The system of claim 1, wherein each of networked devices with a network interface comprises an embedded network traffic analyzer component.

25.   (New) The system of claim 25, wherein a plurality of the networked devices function as a network traffic analyzer component.

26.   (New) The system of claim 1, wherein the network traffic analyzer component comprises a data acquisition component and a post analysis and display component.

27.   (New) The system of claim 27, one networked device comprising a network interface includes the data acquisition component and an another networked device comprising a network interface includes the post analysis and display component for the network traffic analyzer component.